

# HOMEWORK

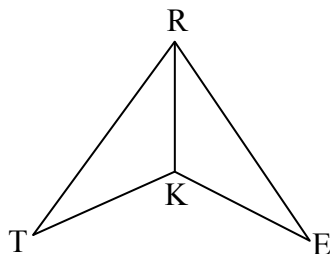
Name: \_\_\_\_\_

Date: \_\_\_\_\_ Block: \_\_\_\_\_

## Foundations Level

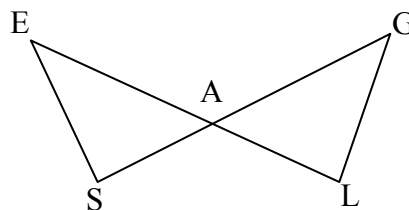
1. Given:  $TR \cong RE$ ,  $\angle TRK \cong \angle ERK$

Prove:  $\angle T \cong \angle E$

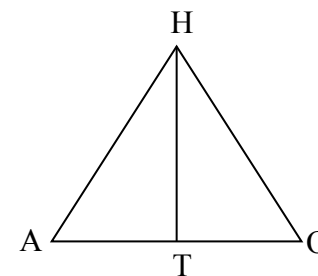


2. Given:  $ES \cong GL$ ,  $\angle S \cong \angle L$

Prove:  $SA \cong AL$



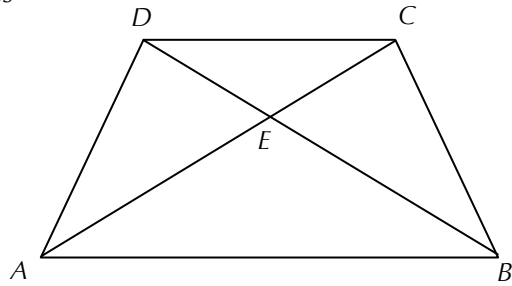
3. Prove the following statement: If  $\overline{HT} \perp \overline{AO}$  and  $\angle A \cong \angle O$  then  $\overline{HT}$  bisects  $\overline{AO}$ .



Application/Extension Level

1. Given:  $\overline{AD} \cong \overline{BC}$ ,  $\angle DAB \cong \angle CBA$

Prove:  $\triangle ABE$  is isosceles



2. Given:  $\overline{FJ}$  is the base of an isosceles triangle.  $\overline{FG} \cong \overline{JH}$ , O is the midpoint of  $\overline{MF}$ , and K is the midpoint of  $\overline{MJ}$ .

Prove:  $\overline{OH} \cong \overline{KG}$

